

Application No.: 09/990,208  
Reply to Final Office Action Dated: July 14, 2005

Atty. Docket: 1320-105 (NL 000656)

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Previously Presented) An invasive device (17) that is intended to be introduced into an object (7) that is to be imaged by means of an MRI apparatus, said invasive device comprising a distal end (18) and is provided with a housing (19) that extends to the distal end, with a circuit (20) that is arranged at the area of the distal end, and also with an electrical connection conductor (21) that is connected to the circuit and extends through the housing, the connection conductor (21) comprises mutually separated segments (22-i), each of which is shorter than a predetermined value, and that the separation between the segments is realized by way of frequency-dependent separating elements (23-i) constructed as cores (25, 26) wound on a carrier (24) in such a manner that magnetic fields generated by current in the cores (25, 26) compensate one another, said elements (23-i) constitute a conductor for LF currents and an isolator for RF alternating current.
2. (Original) An invasive device as claimed in claim 1, wherein the predetermined value for the length of the segments (22-i) is less than 120 cm.
3. (Original) An invasive device as claimed in claim 2, wherein the predetermined value for the length of the segments (22-i) is less than 24 cm.

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4. (Previously Presented) An invasive device as claimed in claim 1, wherein the separating elements are formed by self-inductances that do not contain a ferromagnetic material.

5. (Currently Amended) An invasive device as claimed in claim 4, wherein the self-inductances are formed in that the cores (25, 26) ~~input core (25) and the output core (26)~~ of the connection conductor (21) are wound so as to form bifilar coils.

6. (Previously Presented) An invasive device as claimed in claim 1, wherein the segments are formed by mutually twisting the cores (25, 26).

7. (Previously Presented) An invasive device as claimed in claim 4, wherein the self-inductances have a value of at the most 1  $\mu$ H.

8. Cancelled

9. Cancelled